

Michigan Great Start Readiness Program Evaluation 1995-2014

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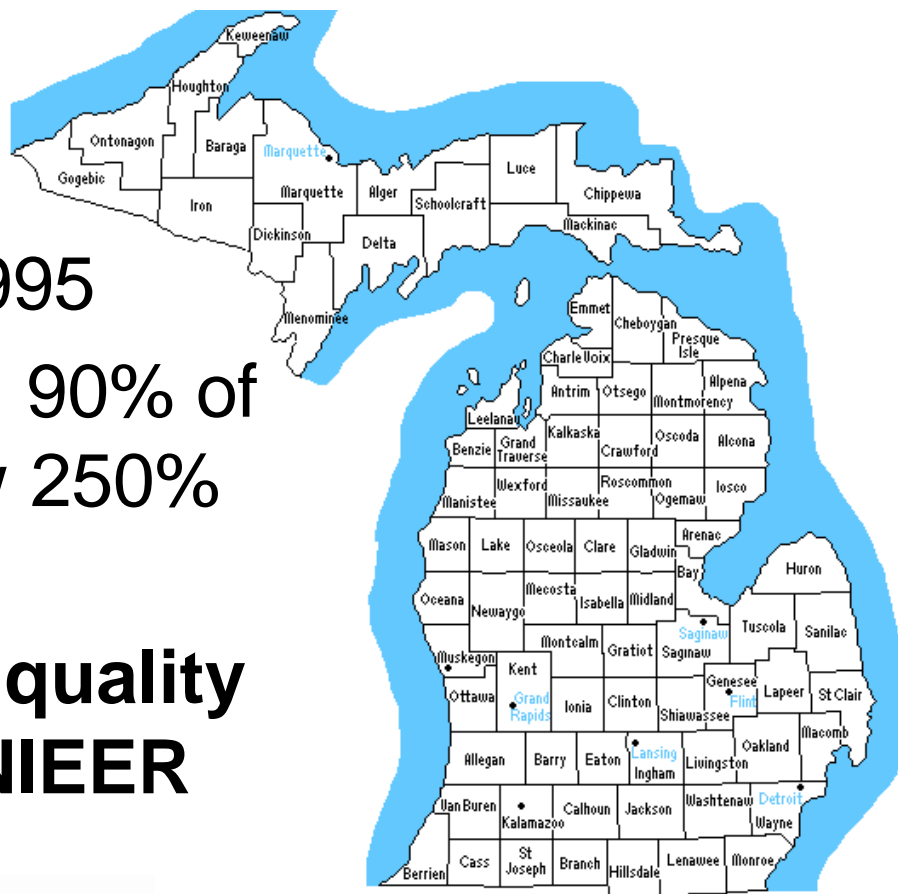
Great Start Readiness Program (GSRP)

Established: 1985

Evaluation began: 1995

Income requirement: 90% of children must be below 250% Federal Poverty Level

Meets 7 out of the 10 quality standards as set by NIEER



GSRP: “Theory of Change” vs. Does it Work?

- The Premise: High-quality preschool can mitigate risk factors and support the school readiness and subsequent achievement for children with demographic factors that predispose them to poorer school and life outcomes.
- Requirements for programming and enrollment
- Requirements for follow-up



GSRP Longitudinal Study Timeline

1995-96 study children attended GSRP

1996-97 target and control group identified in kindergarten

2008-09 “on-time” high school graduation

2009-10 graduation with one-time grade retention

2010-11 graduation with two retentions



A study of 595 low-income children entering kindergarten in 1996

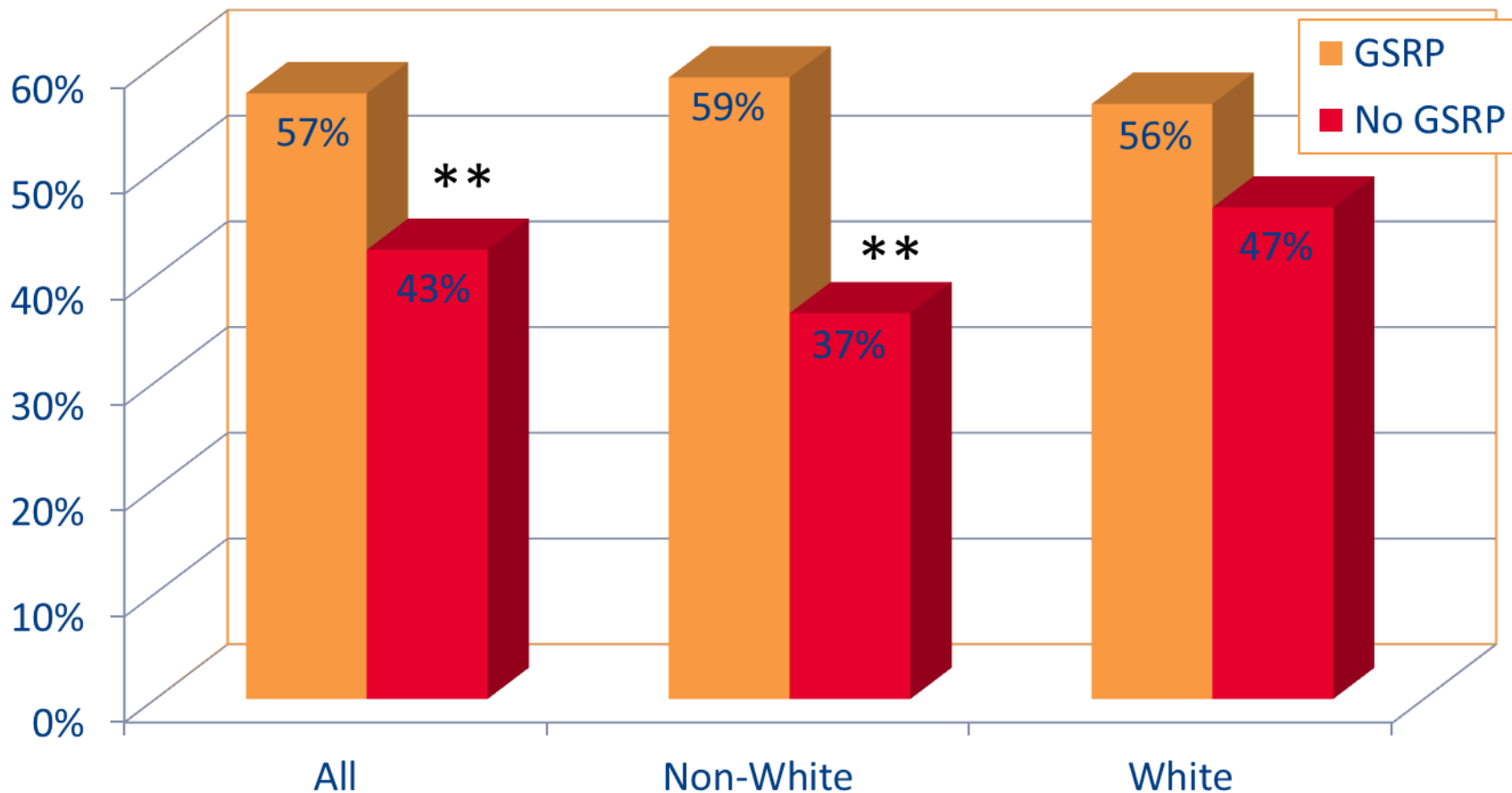
- In six Michigan school districts – Detroit, Grand Rapids, Grayling, Kalamazoo, Muskegon, and Port Huron.
- 338 children attended GSRP.
- 257 children did not attend a preschool program but had family incomes under \$30,300, low enough to qualify for GSRP.



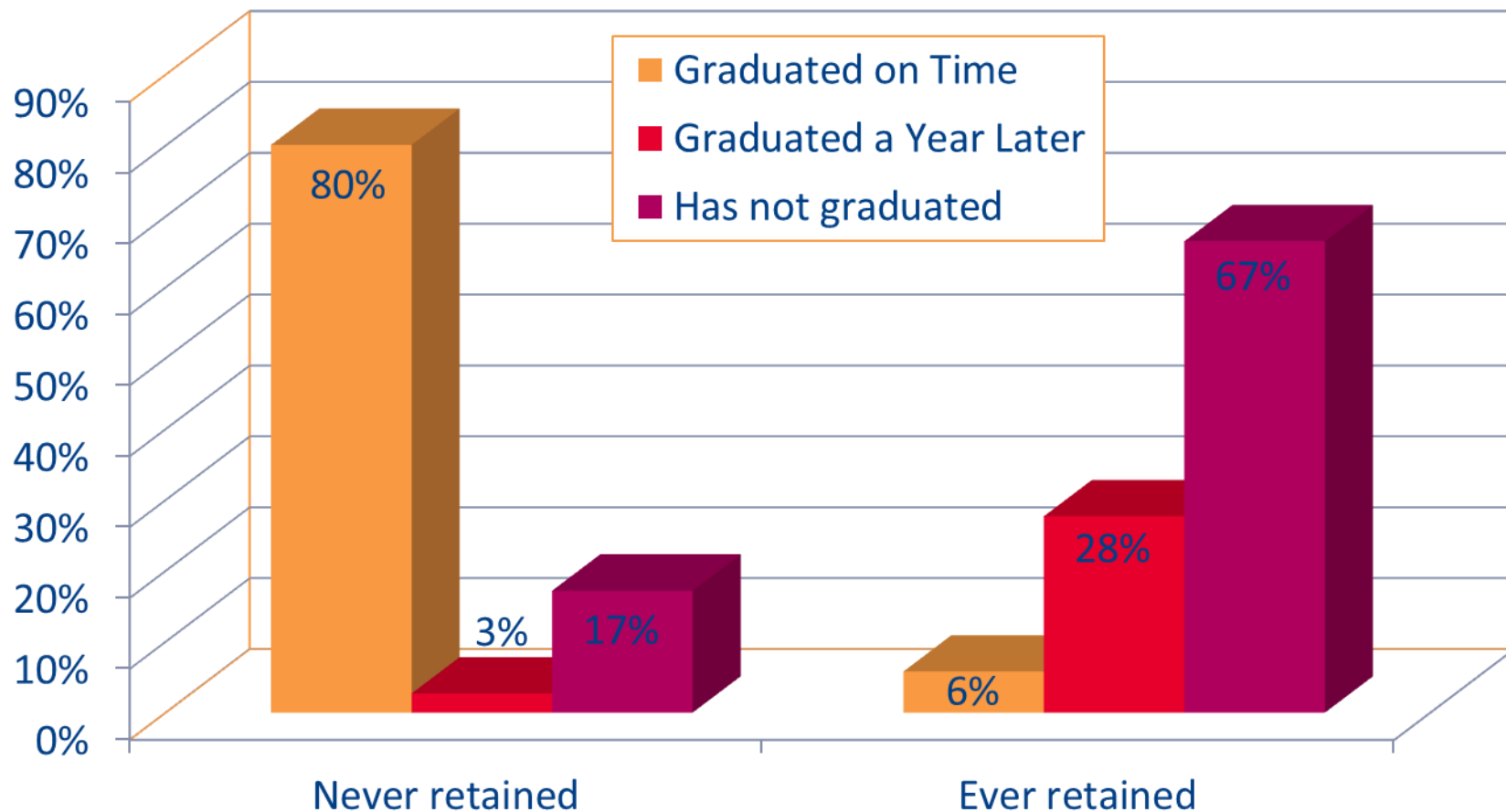
Similar Group Backgrounds

Characteristic	GSRP	No GSRP
Age at kindergarten entry	5.3	5.3
% female	51%	51%
Fathers in home	62%	61%
Persons in household	4.5	4.7
Mothers' years of schooling	12.1	12.0
Fathers' years of schooling	12.1	11.7
Average annual income	\$17,882	\$18,022

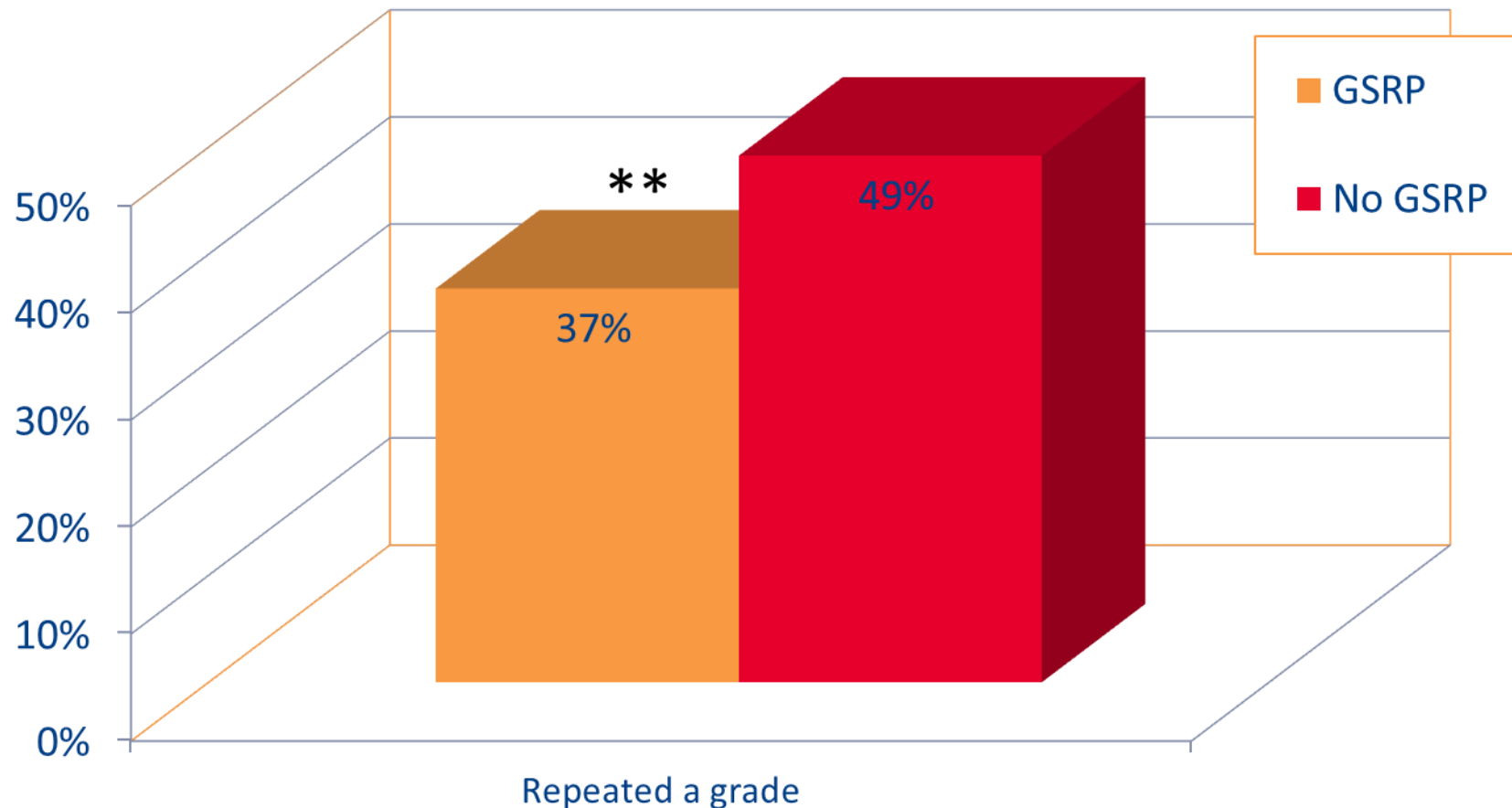
High School Graduation on Time



Graduation Timing by Grade Retention



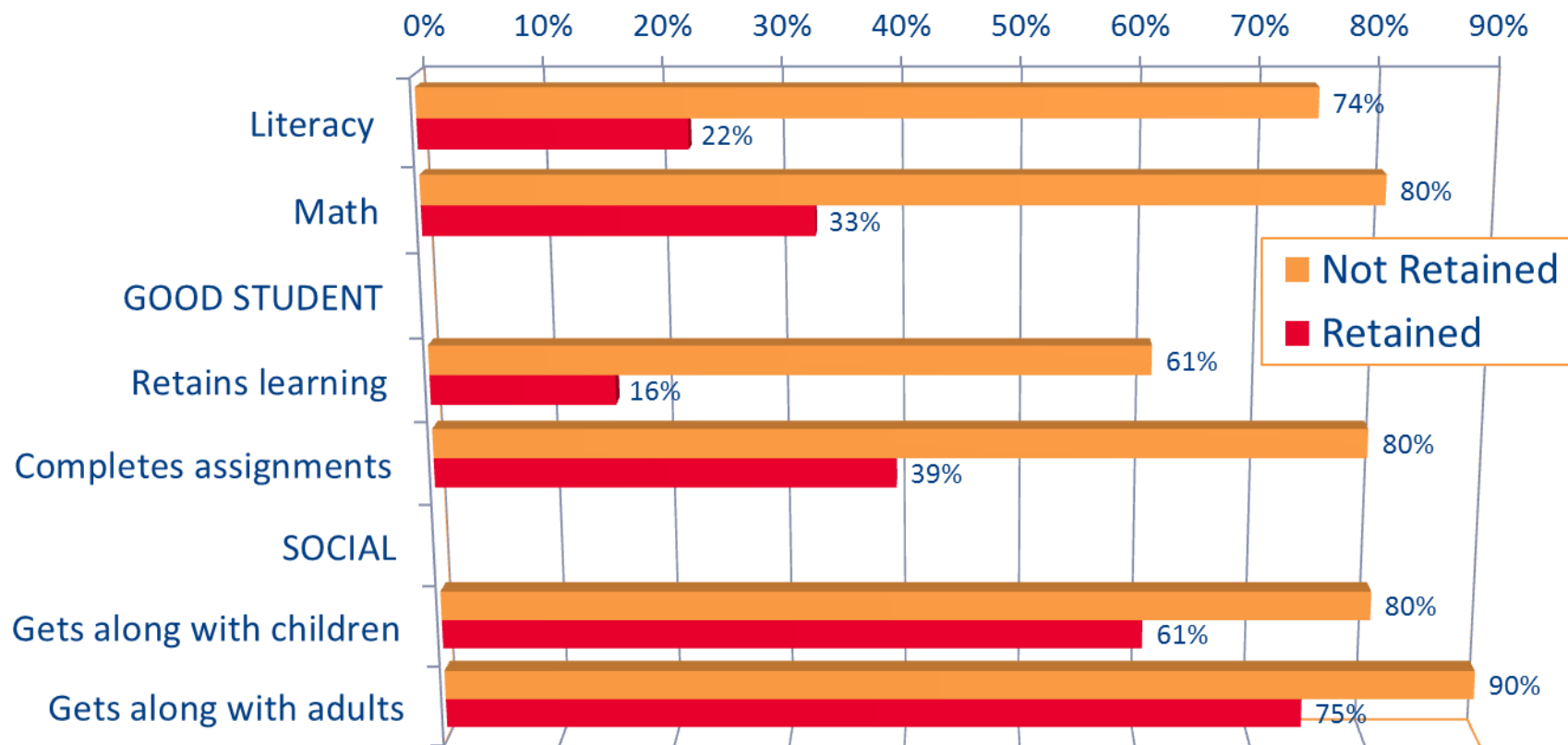
Grade Retention by Grade 12 by GSRP Status



Multiple Grade Retention by Race and GSRP Status



Kindergarten Teacher Ratings of Retained and Non-Retained Students



Local/Regional Evaluations

- Urban School District
- Rural School Districts
- New longitudinal evaluation



GSRP Evaluation

367 children enrolled in GSRP in an urban school district in 2011-2012 were tested at both program entry and exit.

471 children were enrolled sometime during the program year. 104 children were excluded due to dropout ($n = 39$), late enrollment ($n = 35$), limited English ($n = 12$), or parents' non consent ($n = 18$).

Demographic and Risk Variable	N	Mean	%
<u>Age in months at entry test</u>	367	52.7	
<u>Gender</u>			
Male	172		46.9
Female	195		53.1
<u>Ethnicity</u>			
Asian	8		2.2
African American	82		22.3
Hispanic	55		15.0
White	137		37.3
Multiracial	85		23.2
<u>Risk Factor</u>			
Extremely low family income	273		74.4
Low family income	86		23.4
Diagnosed disability/developmental delay	115		31.3
Severe or challenging behavior	7		1.9
Primary home language other than English	59		16.1
Parent(s) with low educational attainment	79		21.5
Abuse/neglect of child or parent	20		5.4
Environmental risk	306		83.4
Number of risk factors	367	2.6	

Instruments

Woodcock-Johnson Tests of Achievement-III (2001)

- Letter Word Identification
- Spelling
- Applied Problems(math)

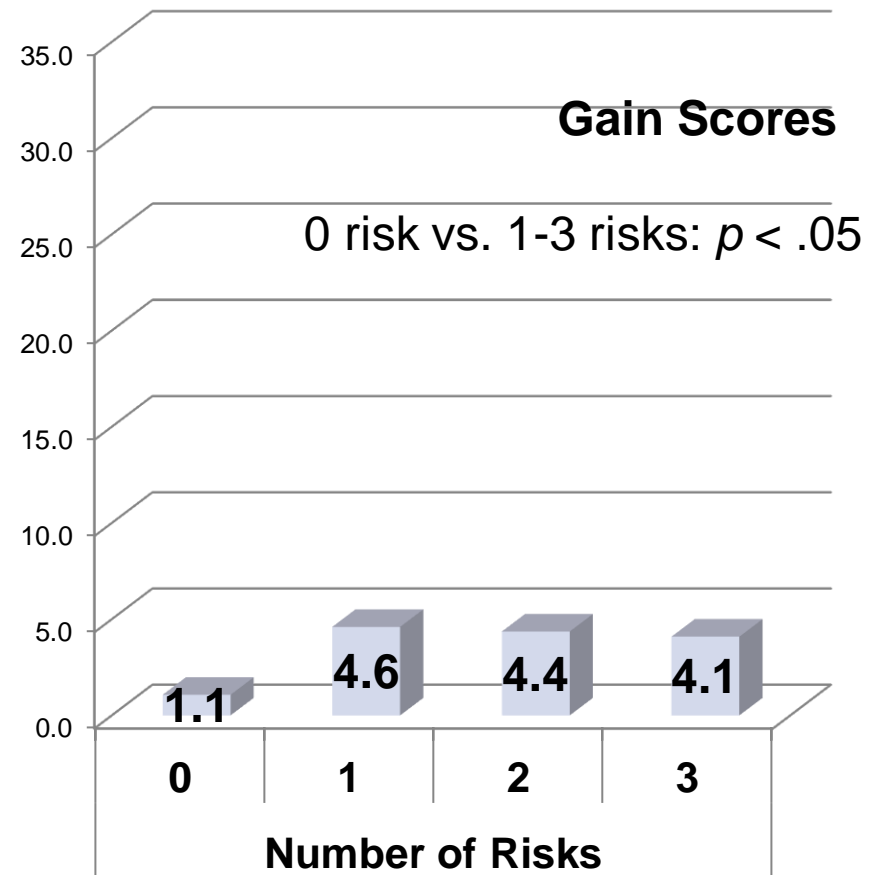
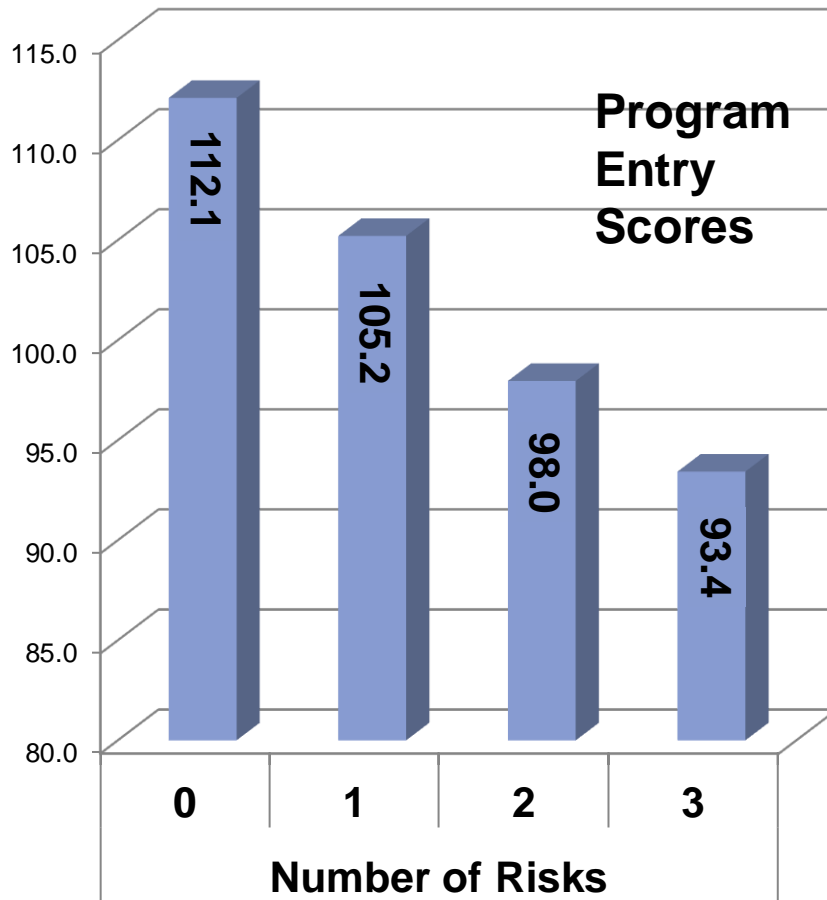
Peabody Picture Vocabulary Test-4 (2007).

Child and Family Characteristics.

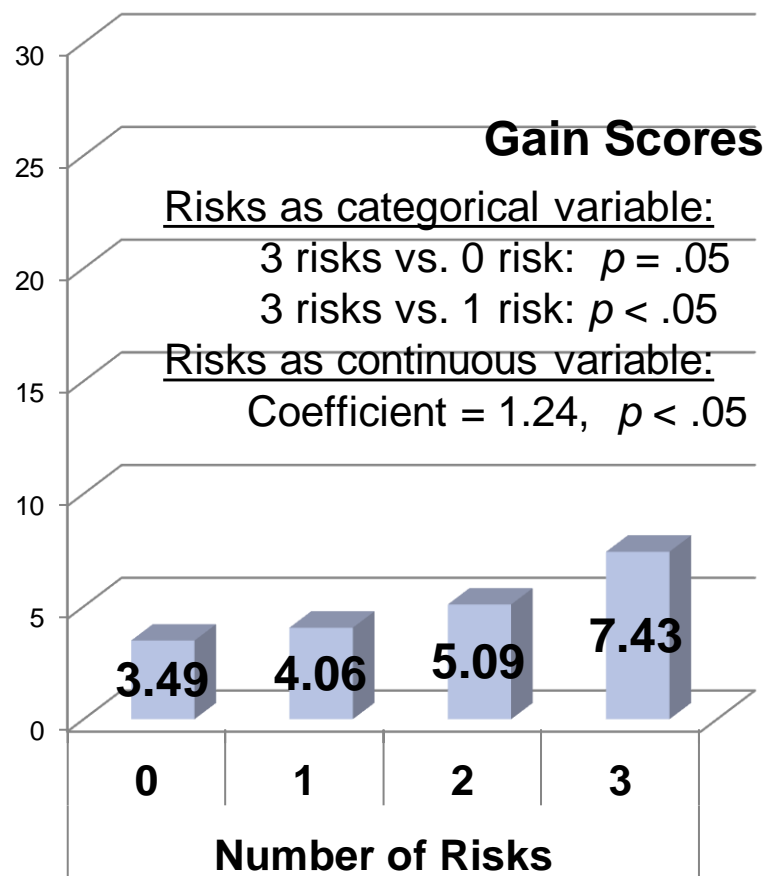
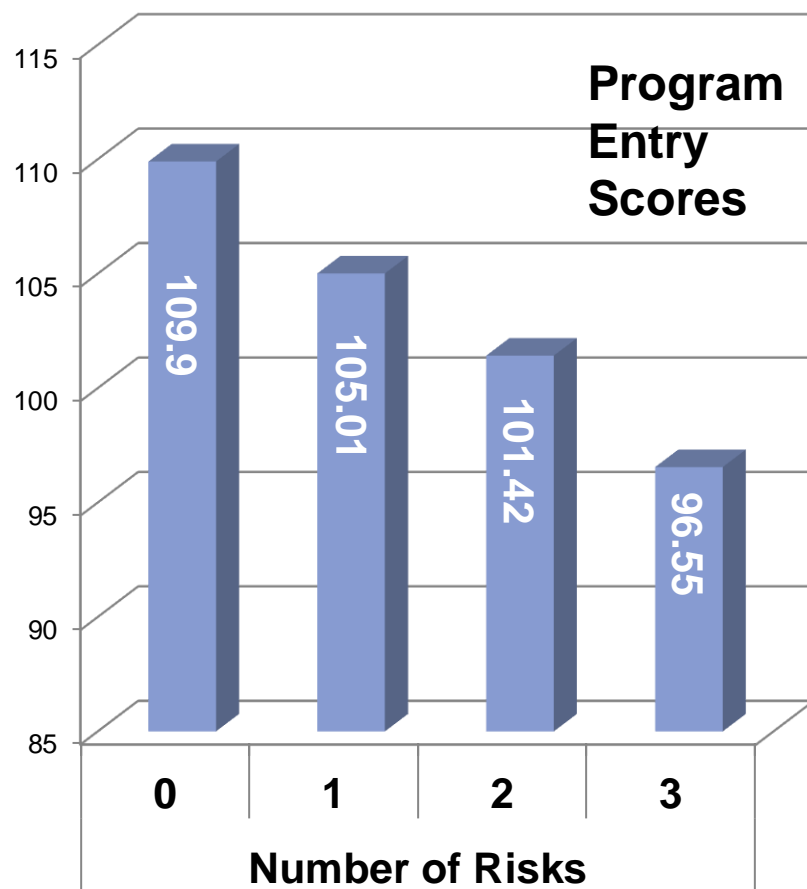
Preschool Program Quality Assessment, 2nd edition (2003).

Category	Risk Status	<i>n</i>	Mean Standard Score at Program Entry			
			PPVT	Letter Word	Spelling	Math Problem
Extremely low family income	Yes	271	98.58	96.42	93.46	101.71
	No	92	109.03	102.11	97.39	106.36
Diagnosed disability/developmental delay	Yes	114	102.90	97.57	94.48	103.37
	No	249	100.46	98.06	94.47	102.65
Severe or challenging behavior	Yes	7	105.86	103.29	93.00	108.57
	No	356	101.14	97.79	94.50	102.76
Primary home language other than English	Yes	59	96.00	96.54	95.19	102.32
	No	304	102.24	98.17	94.34	102.98
Parent(s) with low educational attainment	Yes	77	98.51	93.77	92.24	99.81
	No	286	101.96	98.98	95.08	103.73
Abuse/neglect of child or parent	Yes	19	106.32	101.37	95.65	104.05
	No	344	100.95	97.71	94.40	102.81
Environmental risk	Yes	303	101.00	97.84	94.08	102.80
	No	60	102.40	98.20	96.36	103.28
Minority (non white)	Yes	229	98.02	96.47	93.91	100.59
	No	124	106.72	100.26	95.41	106.71

PPVT: Mean Program Entry and Gain Scores by Risk



Math: Mean Program Entry and Gain Scores by Risk



Implications

Results suggest that GSRP helps reduce the achievement gap between children with high risks and those with lower risks in a program year.

Children who were identified as having higher risks gained more in their relative standings/ percentiles in comparison to national standards than children who had lower risks.

Preschool Variation Study

403 preschool children

190 children attended GSRP

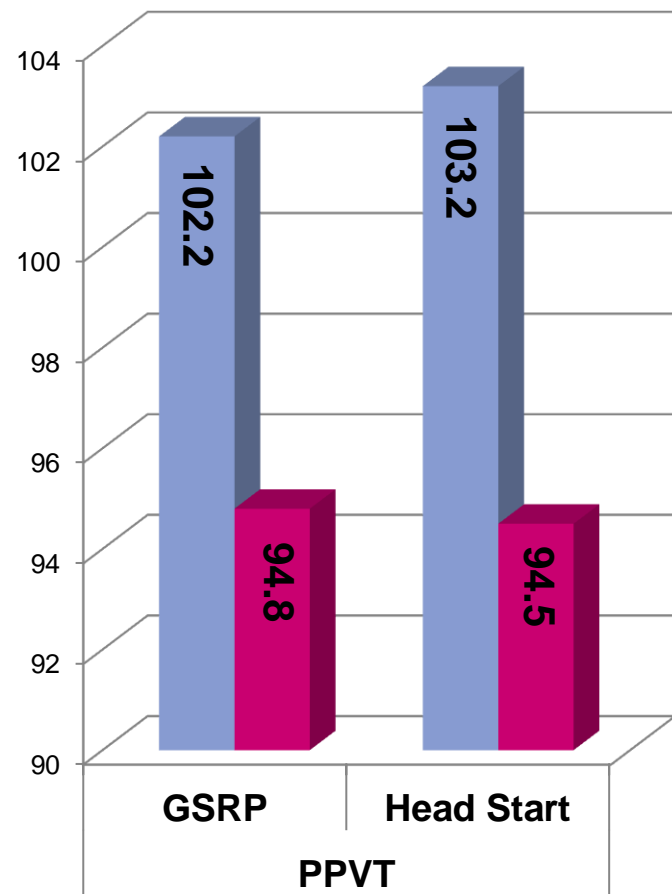
143 children attended Head Start

70 children attended private center-based programs

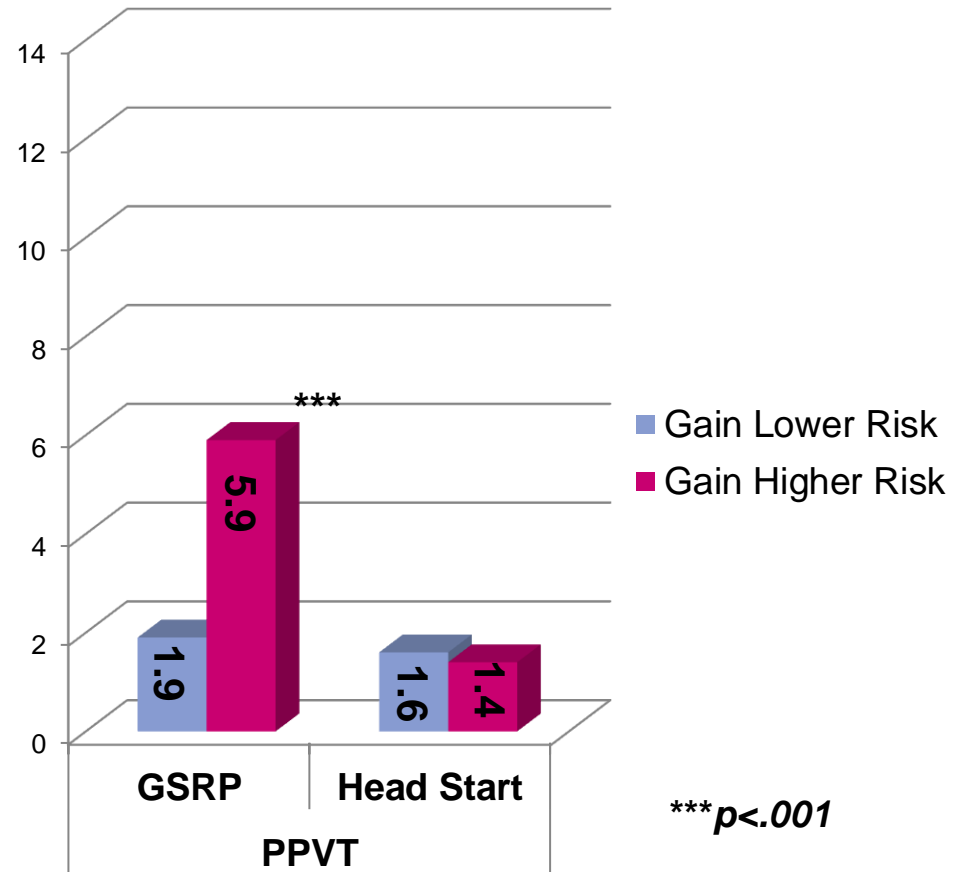
...from across the state of Michigan.

Demographic & Socioeconomic Status	GSRP <i>n</i> = 160	Head Start <i>n</i> = 116	Center Based <i>n</i> = 58	Statistical Significance
<u>Age in months at entry test</u> (mean)	52.6	54.2	53.3	<i>p</i> < .01
<u>Gender</u> (Female %)	51.9	45.7	50.0	N.S
<u>Special Need</u>				
Special need, prek (%)	8.1	12.9	6.9	N.S
IEP status, K-5 (mean %)	11.5	15.9	8.3	N.S
<u>Ethnicity</u> (%)				
White	78.8	61.2	94.8	
African American	11.3	28.5	1.7	
Hispanic	5.6	3.4	3.4	<i>p</i> < .01
American Indian	0.6	3.4	0	
Multiracial	3.8	3.4	0	
<u>Economic Status</u>				
Low income risk, prek (%)	59.4	87.1	15.5	<i>p</i> < .01
Free lunch K-5 (mean %)	41.8	64.8	11.0	<i>p</i> < .01
<u>Mother's education</u>				
Lower than high school	5.6	9.5	0	
High school diploma	55.0	50.0	17.2	<i>p</i> < .01
2-4 years of college	25.0	33.6	29.3	
Bachelor degree or higher	14.4	6.9	53.4	

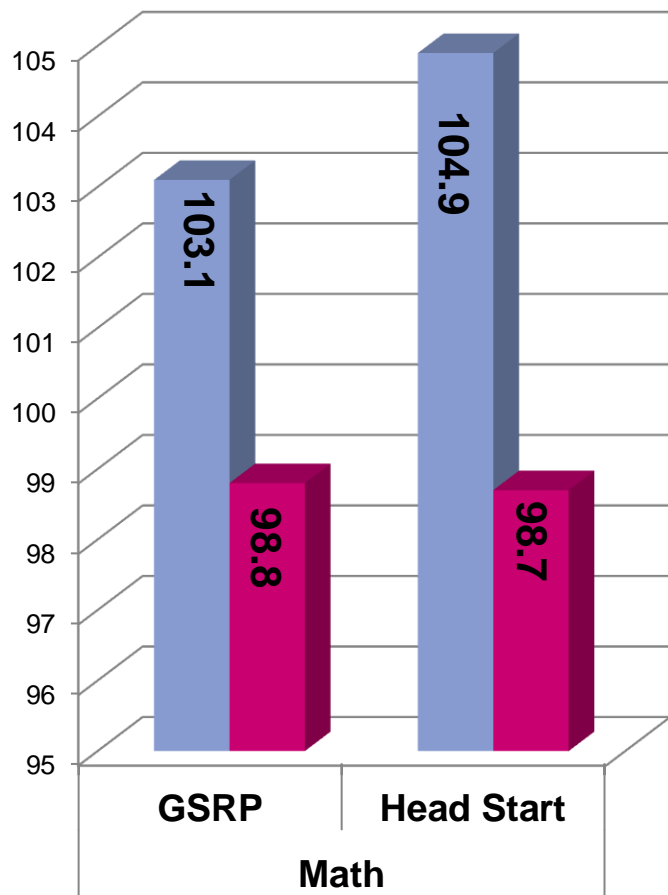
PPVT: Mean Program Entry and Gain Scores by Risk



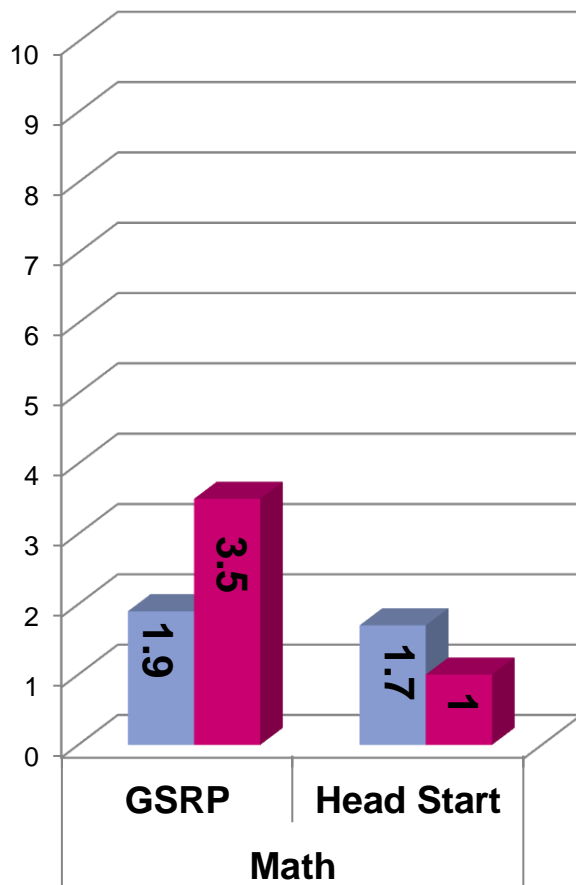
■ Entry Score
Lower Risk
■ Entry Score
Higher Risk



Math: Mean Program Entry and Gain Scores by Risk

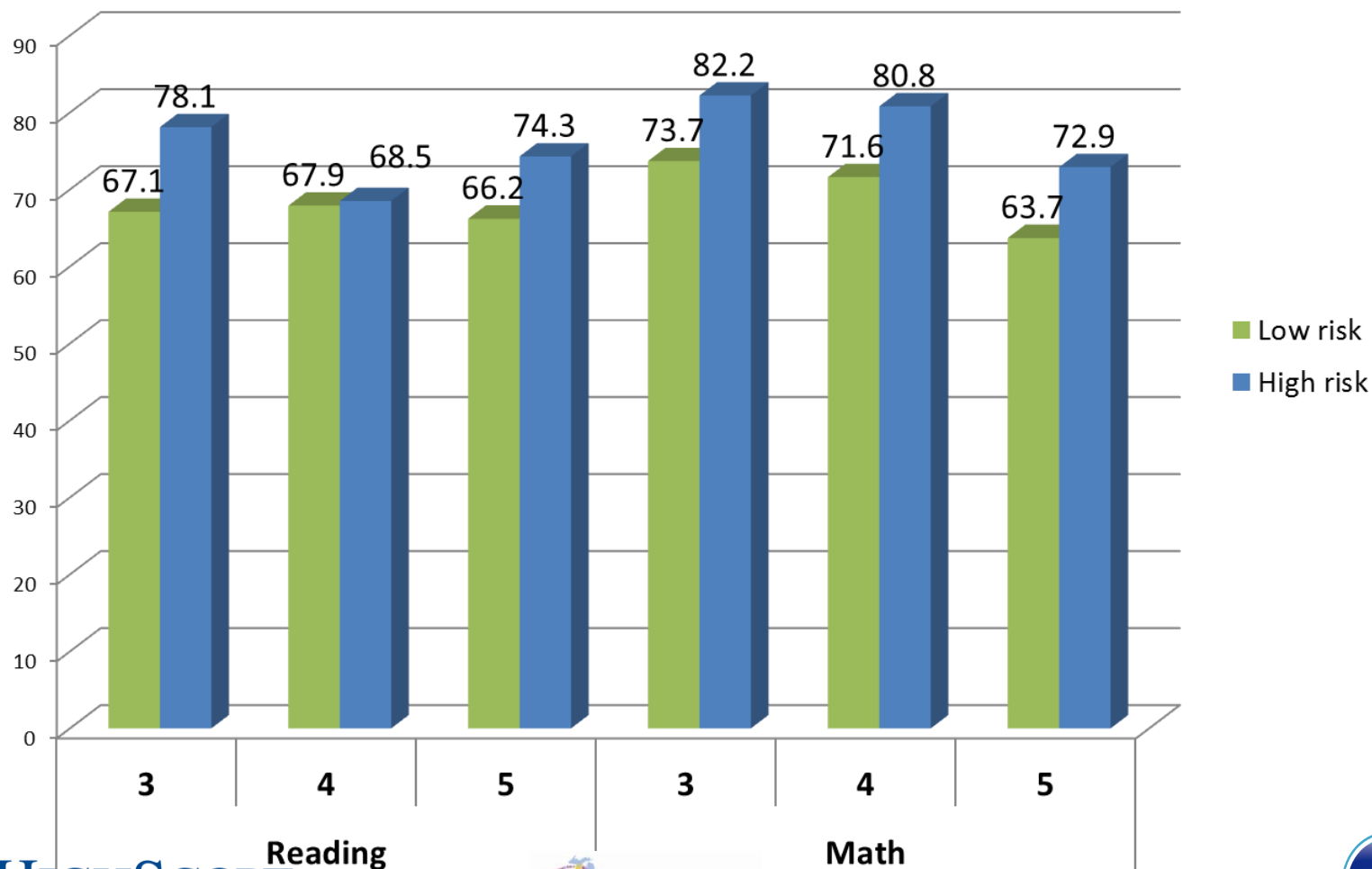


■ Entry Score
Lower Risk
■ Entry Score
Higher Risk



■ Gain Lower Risk
■ Gain Higher Risk

Michigan Educational Assessment Program (MEAP) Scores by risk (GRSP only)



Next Steps

- Are higher risk children's achievement in preschool sustained, relative to lower risk children and other children representative of their cohort?
- Designing local evaluations and follow ups
- Teaching practices which predict better child outcomes.

Questions?

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